CLAIMS

- An adsorbent comprising a substantially syndiotactic styrene polymer.
- 2. The adsorbent as claimed in claim 1, which is produced by forming a complex of a substantially syndiotactic styrene polymer with at least one selected from an organic compound and a solvent of which the molecular size is equivalent to that of the organic compound, followed by shaping the complex, and thereafter removing the organic compound or the solvent from the shaped article without substantially changing the crystal structure of the styrene polymer in the shaped article.
- 3. The adsorbent as claimed in claim 1, which is produced by dissolving or swelling a substantially syndiotactic styrene polymer in an organic compound having an affinity for the polymer, followed by shaping it, and thereafter removing the organic compound from the shaped article.
- 4. The adsorbent, which is produced as claimed in claim 2, wherein the shaping the complex is performed by a melt-casting process.
- 5. The adsorbent, which is produced as claimed in claim 2 or 3, wherein the removing the organic compound is performed by evaporation under reduced pressure.
- 6. The adsorbent, which is produced as claimed in claim 2 or 3, wherein the organ c compound is an aromatic compound.
 - 7. The adsorbent as claimed in claim 6, wherein the

Sulo,

aromatic compound is at least one selected from benzene, toluene, xylene, chlorobenzene, bromobenzene, dichlorobenzene, and trichlorobenzene.

- 8. The adsorbent as claimed in claim 1, which is for adsorbing an organic compound.
- 9. The adsorbent as claimed in claim 1, which is produced by forming a complex of a substantially syndiotactic styrene polymer with at least one selected from an organic compound and a solvent of which the molecular size is equivalent to that of the organic compound, melt-spinning the complex into fibers after or while the complex is formed, and thereafter removing the organic compound or the solvent from the fibers not substantially changing the crystal structure of the styrene polymer in the fibers.

